

DPM 5322

DESOTO, INC.  
MATERIAL SAFETY DATA SHEET



## SECTION I

DESOTO, INC.  
ADMINISTRATIVE AND RESEARCH CENTER

1700 S. MT. PROSPECT RD (BOX 5030)  
DES PLAINES, ILLINOIS 60017

EMERGENCY TELEPHONE (312) 391-9000

CHEMTREC (800) 424-9300

PRODUCT CLASS  
POLYISOCYANATE

MANUFACTURERS CODE IDENTIFICATION  
910-730

TRADE NAME SUPER DESOTHANE ACTIVATOR

DATE OF PREPARATION 09/04/86

\*\*\*\*\*SECTION II-HAZARDOUS INGREDIENTS\*\*\*\*\*

INGREDIENT [CAS NUMBER]	% BY* WEIGHT	OSHA PEL-PPM	ACGIH TLV-PPM	LEL	VAPOR PRESSURE @ 20 DEG C
METHYL ETHYL KETONE [78-93-3]	30.0	200	200	1.8	70
2-ETHOXYETHYL ACETATE[111-15-9]	10.0	S-100	S-5	1.8	2.0
TOLUENE [108-88-3]	10.0	200	100	1.2	35
ALIPHATIC POLYISOCYANATE**	50.0	NE	NE	NE	NE

\*\*HEXAMETHYLENE DIISOCYANATE (HDI) [822-06-0] LESS THAN 0.7% AT TIME OF MANUFACTURE BASED ON RESIN SOLIDS. THE FREE MONOMER CONTENT MAY RISE TO A MAXIMUM OF 1.6% AFTER 3 TO 6 MONTHS STORAGE. A TLV HAS NOT BEEN ESTABLISHED FOR HDI BUT 0.02 PPM IS RECOMMENDED.

\* PERCENT BY WEIGHT:  
TO NEAREST 5% FOR SUBSTANCES 5-95%;  
<5.0 FOR SUBSTANCES 1.0-5.0%;

S=SKIN; C=CEILING LIMIT  
NE = NOT ESTABLISHED  
NA = NOT APPLICABLE

\*\*\*\*\*SECTION III-PHYSICAL DATA\*\*\*\*\*

PROPERTY	MEASUREMENT
BOILING RANGE @ 760 MM HG	176.0 TO 313.0 DEG F. 80.0 TO 156.0 DEG C.
VAPOR DENSITY	(X) HEAVIER ( ) LIGHTER THAN AIR
WEIGHT PER GALLON	8.1 LBS.
PERCENT VOLATILE BY VOLUME	54.2
EVAPORATION RATE	( ) FASTER (X) SLOWER THAN ETHER
APPEARANCE AND ODOR	LIQUID, SOLVENT ODOR

## \*\*\*\*\*SECTION IV-FIRE AND EXPLOSION DATA\*\*\*\*\*

DOT CATEGORY            FLAMMABLE LIQUID                            FLASH POINT            22.0 DEG F.

OSHA CATEGORY           FLAMMABLE LIQUID-CLASS I B            (CLOSED CUP)           -5.6 DEG C.

LOWER EXPLOSIVE LIMIT (LEL):            SEE SECTION II

EXTINGUISHING MEDIA:    USE NATIONAL FIRE PROTECTION ASSOCIATION CLASS B  
EXTINGUISHERS (CARBON DIOXIDE, DRY CHEMICAL OR FOAM).

UNUSUAL FIRE AND EXPLOSION HAZARDS:    VAPORS MAY ACCUMULATE IN INADEQUATELY  
VENTILATED OR CONFINED AREAS. VAPORS MAY FORM EXPLOSIVE MIXTURES WITH AIR.  
VAPORS MAY TRAVEL LONG DISTANCES. FLASHBACK OF FLAME TO THE HANDLING SITE  
MAY OCCUR. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT.  
DURING A FIRE IRRITATING AND TOXIC GASES AND AEROSOLS FROM THE DECOMPOSITION/  
COMBUSTION PRODUCTS MAY BE PRESENT.

SPECIAL FIRE FIGHTING PROCEDURES:    WATER SPRAY MAY BE INEFFECTIVE. COOL  
FIRE EXPOSED CONTAINERS WITH WATER. FOG NOZZLES ARE PREFERRED. WEAR  
NIOSH/MSHA APPROVED SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE  
CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

## \*\*\*\*\*SECTION-V REACTIVITY DATA\*\*\*\*\*

STABILITY:                    ( ) UNSTABLE            (X) STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):

AVOID CONTACT WITH WATER, ALCOHOLS, AND AMINES.

HAZARDOUS DECOMPOSITION PRODUCTS:    PRODUCTS OF COMBUSTION ARE HAZARDOUS.

CO<sub>2</sub>, CO, OXIDES OF NITROGEN AND TRACES OF HCN AND ISOCYANATE MONOMER.

HAZARDOUS POLYMERIZATION:                            ( ) MAY OCCUR            (X) WILL NOT OCCUR

CONDITIONS TO AVOID:

TEMPERATURES ABOVE MAXIMUM STORAGE TEMPERATURES.

## \*\*\*\*\*SECTION VI-WASTE DISPOSAL AND ENVIRONMENTAL RELEASES\*\*\*\*\*

ENVIRONMENTAL RELEASES:    DEPENDING ON THE QUANTITY AND CIRCUMSTANCES, AN  
UNAUTHORIZED RELEASE OF THIS MATERIAL TO THE ENVIRONMENT MAY BE REPORTABLE  
UNDER FEDERAL LAW TO THE NATIONAL RESPONSE CENTER (800-424-8802). STATE AND  
LOCAL GOVERNMENTS MAY ALSO HAVE REPORTING REQUIREMENTS OF WHICH YOU SHOULD  
BE AWARE.

REMOVE ALL SOURCES OF IGNITION. WEAR PERSONAL PROTECTIVE EQUIPMENT TO AVOID  
BREATHING VAPORS AND SKIN AND EYE CONTACT WITH THE SPILLED MATERIAL. USE  
NON-SPARKING TOOLS. FOR SMALL SPILLS, DIKE AND ABSORB WITH INERT MATERIAL.  
COLLECT MATERIAL IN OPEN TOP DRUM AND TAKE TO ISOLATED AREA (OUT-OF-DOORS PRE-  
FERRED). FILL DRUM WITH DECONTAMINATION SOLUTION OF WATER (90-95%), DETERGENT  
(2%) AND AMMONIA (3-8%). NEUTRALIZE SPILL AREA WITH DECONTAMINATION SOLUTION.  
USE EMERGENCY RESPONSE PROFESSIONALS IF MANAGING A RELEASE IS BEYOND THE  
CAPABILITY OF IN-HOUSE PERSONNEL.

WASTE DISPOSAL:    THIS MATERIAL IS CLASSIFIED AS AN IGNITABLE HAZARDOUS WASTE.  
WHEN AFFECTING ITS DISPOSAL, INSURE THAT IT IS PACKAGED, STORED, TRANSPORTED AND  
OTHERWISE MANAGED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL HAZARDOUS  
WASTE LAWS AND REGULATIONS. NO DISPOSAL METHOD IS TO USED WHICH WOULD POSE  
AN ENVIRONMENTAL OR HUMAN HEALTH THREAT, INCLUDING ANY WHICH WOULD CONTAMINATE  
GROUND OR SURFACE WATERS.

## \*\*\*\*\*SECTION VII-HEALTH HAZARD DATA\*\*\*\*\*

THRESHOLD LIMIT VALUE: SEE SECTION II (NOT ESTABLISHED FOR PRODUCT)

EFFECTS OF OVEREXPOSURE:

INHALATION:

EXPOSURE MAY CAUSE NASAL AND RESPIRATORY IRRITATION AND ACUTE CENTRAL NERVOUS SYSTEM DEPRESSION CHARACTERIZED BY HEADACHE, DIZZINESS, STAGGERING GAIT, CONFUSION OR UNCONSCIOUSNESS. ASPHYXIATION MAY RESULT FROM BREATHING OXYGEN DEFICIENT AIR.

INHALATION OF ISOCYANATES MAY CAUSE ALLERGIC SENSITIZATION. SYMPTOMS MAY INCLUDE MUCOUS MEMBRANE IRRITATION, TIGHTNESS IN CHEST, IRRITATION OF THE RESPIRATORY TRACT, COUGHING, HEADACHE AND SHORTNESS OF BREATH.

ASTHMA-LIKE ATTACKS MAY FOLLOW.

SKIN CONTACT:

PROLONGED OR REPEATED CONTACT MAY CAUSE IRRITATION, DEFATTING OR DERMATITIS. PROLONGED OR REPEATED SKIN CONTACT MAY ALSO RESULT IN SKIN SENSITIZATION IN SOME INDIVIDUALS.

EYE CONTACT:

PRIMARY IRRITATION.

INGESTION:

MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA.

OTHER HEALTH EFFECTS: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. EFFECTS INCLUDE CONCENTRATION DIFFICULTIES, DIMINISHED MANUAL DEXTERITY AND MEMORY LOSS.

OTHER HEALTH EFFECTS: REPRODUCTIVE AND BLOOD DISORDERS AND BIRTH DEFECTS HAVE BEEN OBSERVED IN TESTS ON LABORATORY ANIMALS WITH 2-METHOXYETHANOL, 2-ETHOXYETHANOL AND 2-ETHOXYETHYL ACETATE.

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION:

REMOVE FROM EXPOSURE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION OR CARDIOPULMONARY RESUSCITATION (CPR) IF REQUIRED. IF BREATHING IS DIFFICULT, GIVE OXYGEN. KEEP WARM AND QUIET. GET MEDICAL ATTENTION.

SKIN CONTACT:

WASH AFFECTED AREAS WITH SOAP AND WATER. DO NOT USE SOLVENTS. REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE. GET MEDICAL ATTENTION. DISCARD CONTAMINATED LEATHER ITEMS.

EYE CONTACT:

FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION.

INGESTION:

GET MEDICAL ATTENTION.

## \*\*\*\*\*SECTION VIII-SPECIAL PROTECTION INFORMATION\*\*\*\*\*

RESPIRATORY PROTECTION: WEAR A NIOSH/MSHA APPROVED RESPIRATOR WHILE EXPOSED. AIR SUPPLIED RESPIRATORS ARE RECOMMENDED. A VAPOR/PARTICULATE (SPRAY PAINT) RESPIRATOR MAY BE APPROPRIATE WHERE AIR MONITORING DEMONSTRATES VAPOR LEVELS BELOW TEN TIMES THE APPLICABLE EXPOSURE LIMITS. FOLLOW RESPIRATOR MANUFACTURERS DIRECTIONS AND OSHA REGULATIONS (29 CFR 1910.134) FOR RESPIRATOR USE.

VENTILATION: WHERE EMPLOYEES MAY BE EXPOSED, PROVIDE GENERAL DILUTION OR LOCAL EXHAUST VENTILATION IN VOLUME AND PATTERN TO KEEP LEVEL OF HAZARDOUS INGREDIENTS IN SECTION II BELOW RECOMMENDED (ACGIH TLV) OR REGULATE D (OSHA PEL) LIMIT. WHERE EMPLOYEES WILL NOT BE EXPOSED, KEEP LEVEL BELOW 25% OF LEL IN SECTION II.

PROTECTIVE GLOVES: WEAR CHEMICALLY RESISTANT GLOVES.

EYE PROTECTION: SAFETY GLASSES WITH SIDE SHIELDS OR GOGGLES

OTHER PROTECTIVE EQUIPMENT: AVOID SKIN CONTACT BY USE OF OTHER PROTECTIVE CLOTHING. A SAFETY SHOWER, AN EYE BATH AND WASHING FACILITIES SHOULD BE AVAILABLE.

## \*\*\*\*\*SECTION IX-SPECIAL PRECAUTIONS\*\*\*\*\*

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:  
KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS AND FLAME. DO NOT STORE ABOVE 49 DEG C (120 DEG F). STORE FLAMMABLE LIQUIDS IN ACCORDANCE WITH APPLICABLE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) CODES AND GOVERNMENTAL REGULATIONS.  
GROUNDING AND BONDING PROCEDURES SHOULD BE FOLLOWED WHEN TRANSFERRING THIS MATERIAL. AVOID FREE FALL OF LIQUID. DO NOT SMOKE WHERE THIS MATERIAL IS USED OR STORED. DO NOT APPLY TO HOT SURFACES.

STORE IN TIGHTLY CLOSED CONTAINERS AND PROTECT FROM MOISTURE AND FOREIGN MATERIALS. IDEAL STORAGE TEMPERATURE RANGE IS 10-30 DEG C (64-86 DEG F). ISOCYANATES REACT SLOWLY WITH WATER TO FORM CO2 GAS WHICH CAN CAUSE CONTAINER TO EXPAND OR POSSIBLY RUPTURE.

OTHER PRECAUTIONS:  
EMPTY DRUMS MAY CONTAIN EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR DRUM.  
DO NOT TAKE INTERNALLY. DO NOT DELIBERATELY CONCENTRATE THIS PRODUCT AND INHALE THE VAPORS. PREVENT PROLONGED CONTACT WITH CONTAMINATED CLOTHING WASH CONTAMINATED CLOTHING BEFORE REUSE.  
VAPORS OF THIS PRODUCT ARE HEAVIER THAN AIR AND MAY COLLECT IN LOW OR CONFINED AREAS. DO NOT ENTER SUCH AREAS WITHOUT FOLLOWING APPROPRIATE PROCEDURES INCLUDING AIR MONITORING, USE OF SUPPLIED AIR IF NECESSARY AND THE PRESENCE OF AN OBSERVER FOR ASSISTANCE.

DO NOT SAND, FLAME CUT, BRAZE OR WELD THE DRY COATING WITHOUT NIOSH APPROVED RESPIRATOR OR APPROPRIATE VENTILATION.

OBSERVE PRECAUTIONARY LABEL WARNINGS.

PREPARED BY S. M. STEVENSON  
TECHNICAL INFORMATION SPECIALIST